

## **BEVERAGE CARRIER**

### **Field of the Invention**

The invention relates to a device for carrying a beverage, more particularly, relates to a device for holding standard beverage containers such as cans or bottles, on a user's hip, belt, screw, hook or glass window, for purposes of activities such as sitting, standing, walking, driving, golfing, rolling and any other non-vigorous activities.

### **Background of the Invention**

Known beverage holders have been complex in construction, typically made from rigid materials, heavy in weight and/or unable to accommodate a variety of different sized bottles.

There is need for an improved beverage carrier, which is light, resilient, and is convenient for a user to carry.

### **Summary of the Invention**

The present invention provides a device for holding a beverage can or bottle that is preferably made from light, resilient, and compact one-piece molded plastic, and is able to accommodate cans or bottles with different shapes, size, and length.

The present invention provides a convenient beverage carrying device for carrying beverage cans or bottles with hands free. According to one aspect of the present invention, the device includes an elongated axial support element, a pair of resilient clip arms, a pair of base arms, a pair of support struts and a bottom support element.

The elongated axial support element extends between a top end and a bottom end and parallel to a central reference axis. Each clip arm extends in a substantially arcuate locus about the central axis from a point at or near the top end of the axial support element to a distal tip. The distal tips of the clip arms are mutually opposite to and spaced apart from each other. Each base arm extends in a substantially arcuate locus about the central axis from the bottom end of the axial support element to a distal tip. Each base arm is substantially parallel to an associated one of the clip arms, and the distal tips of the base

arms are mutually opposite to and spaced apart from each other. Each support strut extends from the axial support element in a substantially arcuate locus to the distal tip of an associated one of the base arms to ensure stability of the can or bottle in the device. The bottom support element extends along a plane transverse to the central axis from the bottom end of the axial support element, and the bottom support element has a convex surface to fit the concave bottom of cans or bottles to prevent slippage. The convex bottom support element fits a concave bottom of the beverage can or bottle to further secure the beverage can or bottle in the device.

In a preferred embodiment, the device further comprises a support clip extending radially outward from the top end of the axial support element. The support clip could be a belt clip or a hook, so that a user can clip the device to a belt, pants or glass window, or hook the device to a nail or screw.

The resilient clip arms and side support struts of the beverage carrier provide two easy ways to insert or remove a beverage bottle from both the top and the side of the beverage carrier. One way to insert or remove a beverage can or bottle into or from the beverage carrier is to put the beverage can or the beverage bottle into the device from the top, and the other way is to push the beverage container into the device from the side through the clip arms. Also the resilient plastic material, which the device is made from, allows self adjustment to fit beverage containers with different size, shape, and length.

Other advantages and novel features will be set forth in the detailed description, taken in conjunction with the accompanying drawings.

### **Description of the Figures**

FIG. 1 is a side view of one preferred embodiment of a beverage carrier in accordance with the present invention;

FIG. 2 is a front view of the beverage carrier of FIG.1;

FIG. 3 is a back view of the beverage carrier of FIG.1;

FIG. 4 is a top view of the beverage carrier of FIG.1;

FIG. 5 is a side view of another embodiment of a beverage carrier in accordance with the present invention;

FIG. 6 is a top view of the beverage carrier of FIG. 5;

FIG. 7 is a side view of another preferred embodiment of the present invention;

FIG. 8 is a perspective view of a further preferred embodiment of the present invention;

FIG. 9 shows a side view the beverage carrier in FIG. 8 in use with a belt; and

FIG. 10 shows a perspective view of another preferred embodiment of the present invention.

### **Detailed Description of the Preferred Embodiment**

For the purposes of promoting an understanding of the present invention, reference will now be made to the embodiments and methods illustrated in the drawings and specific language will be used to describe the same.

FIG. 1 is a side view of one preferred embodiment of a beverage carrier 10 of the present invention. As shown in FIG. 1, an elongated axial support element 12 extends parallel to a central reference axis A between a top end 14 and a bottom end 16. A pair of resilient clip arms 18 and 20 extend from points at or near the top end 14 of the axial support element 12 to distal tips 22 and 24. The clip arms 18 and 20 preferably each extend in a substantially arcuate locus about the central axis A and the distal tips 22 and 24 of the clip arms 18 and 20 are mutually opposite to and spaced apart from each other.

As shown in FIG. 2, a pair of base arms 26 and 28 extend from the bottom end 16 of the axial support element 12 to distal tips 30 and 32. The base arms 26 and 28 extend in a substantially arcuate locus about the central axis A, and each of the base arms 26 and 28 is substantially parallel to an associated one of the clip arms 18 and 20, whereby the distal tips 30 and 32 of the base arms are mutually opposite to each other.

As shown in FIG. 3, a pair of support struts 34 and 36 extend from points between the top end 14 and the bottom end 16 of the axial support element 12 in a substantially arcuate locus to the distal tips 30 and 32 of the base arms 26 and 28.

Referring to FIG. 1 and FIG. 4, a bottom support element 38 extends along a plane B transverse to the central axis A from the bottom end 16 of the axial support element 12. The bottom support element 38 preferably includes a convex surface 40 at points about the central axis to support a concave surface of a bottom of a beverage bottle. In alternative embodiments, the bottom support element 38 is flat, as shown in FIG. 8.

Referring again to FIG. 1, the beverage carrier preferably has a support clip 42 extends radially outward from the top end 14 of the axial support element 12. The support clip 42 is adapted to clip the beverage carrier to a belt, or other places as desired by a user.

Referring again to FIG. 3, in one preferred embodiment, a keyhole 44 is defined on the support clip 42. The keyhole 44 is adapted to secure the beverage carrier to a nail or screw.

FIG. 5 and FIG. 6 are respectively a side view and a top view of another preferred embodiment of the beverage carrier in accordance with the present invention. As shown in FIG. 5 and FIG. 6, the bottom support element 38 extends along a plane C transverse to the central axis A from the bottom end 16 of the axial support element 12, and the bottom support element 38 defines a hole 46 at points disposed about the central axis A.

FIG. 7 illustrates a side view of another preferred embodiment of the present invention, in which the beverage carrier includes only one resilient clip arm 50, which extends from the axial support element 12 to a distal tip 52. The resilient clip arm 50 extends in a substantially circular locus about the central axis A, and the substantially circular locus is greater than a semicircle, such that the resilient clip arm 50 and the axial support element 12 can securely hold a beverage bottle in the beverage carrier. The beverage carrier in FIG. 7 also includes a bottom support element 54 extending from the bottom end of the axial support element 12 and transverse to the central axis A to support the bottle, and a support clip 56 extending radially outward from the top end of the axial support element 12. The embodiment shown in FIG. 7 does not include the base arms and support struts as shown in FIGS. 1-3.

FIG. 8 is a perspective view of a further preferred embodiment of the present invention, which is similar to the embodiment shown in FIGS. 1-3, except that the embodiment shown in FIG. 8 does not include the pair of base arms and support struts as shown in FIGS. 1-3. FIG. 9 shows a side view the beverage carrier in FIG. 8, which is clipped on a belt and carries a beverage bottle.

FIG. 10 shows a perspective view of another preferred embodiment of the present invention, which is similar to the embodiment shown in FIG. 5.

While the preferred embodiments and method of use of the invention have been illustrated and described in some detail in the drawings and foregoing description, it should be understood that this description is made only by way of example to set forth the best mode contemplated of carrying out the invention and not as a limitation to the scope of the invention which is pointed out by the claims below.